

Element-based Type-I Error, Power and ROC Curve Figures

Burçak Otlu¹, Can Firtina², Sündüz Keleş^{3,4}, & Oznur Tastan²

¹ Department of Computer Engineering, Middle East Technical University, Ankara, Turkey

² Department of Computer Engineering, Bilkent University, Ankara, Turkey

³ Department of Statistics, University of Wisconsin, Madison, WI, U.S.A.

⁴ Department of Biostatistics and Medical Informatics, University of Wisconsin, Madison, WI, U.S.A.

April 16, 2017

1 H3K9ME3 in GM12878, ROC Curve Figures

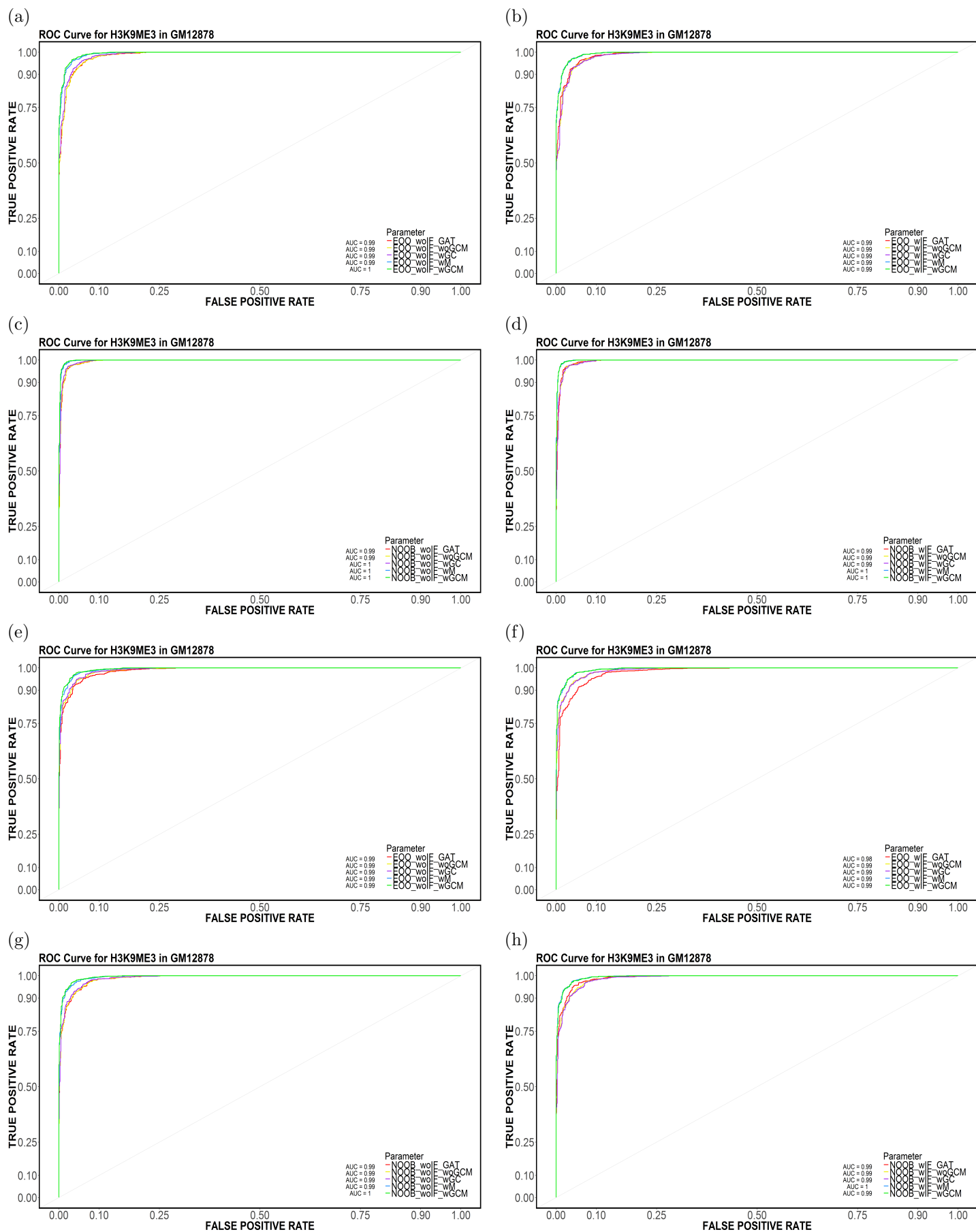


Figure 1: Element-based ROC curves for H3K9ME3 in GM12878 under (a,b) (E00, CompletelyDiscard, Top5) (c,d) (NOOB, CompletelyDiscard, Top5) (e,f) (E00, TakeTheLongest, Top20) (g,h) (NOOB, TakeTheLongest, Top20) settings.

2 H3K9ME3 in K562, ROC Curve Figures

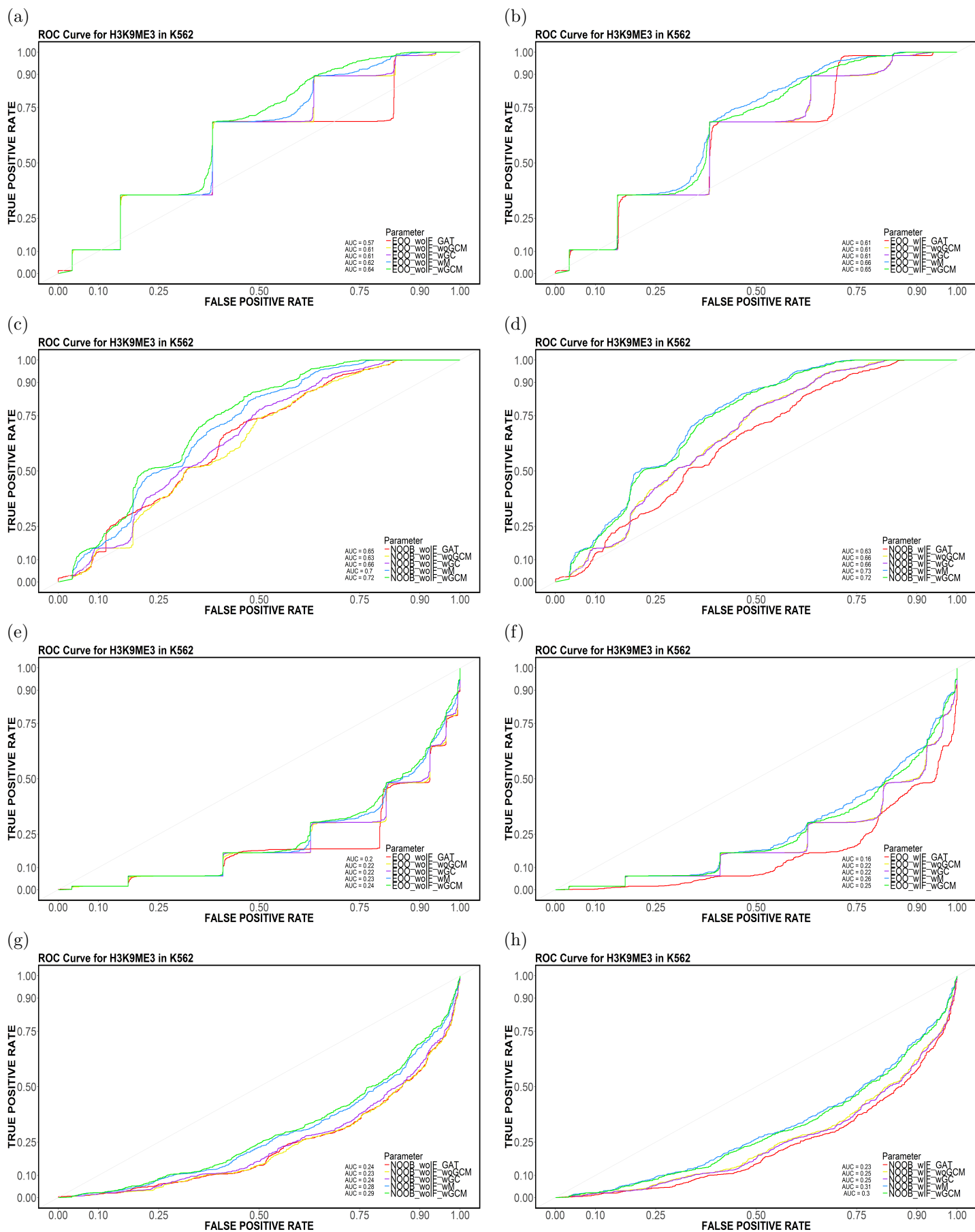


Figure 2: Element-based ROC curves for H3K9ME3 in K562 under (a,b) (E00, CompletelyDiscard, Top5) (c,d) (NOOB, CompletelyDiscard, Top5) (e,f) (E00, TakeTheLongest, Top20) (g,h) (NOOB, TakeTheLongest, Top20) settings.

3 H4K20ME1 in GM12878, ROC Curve Figures

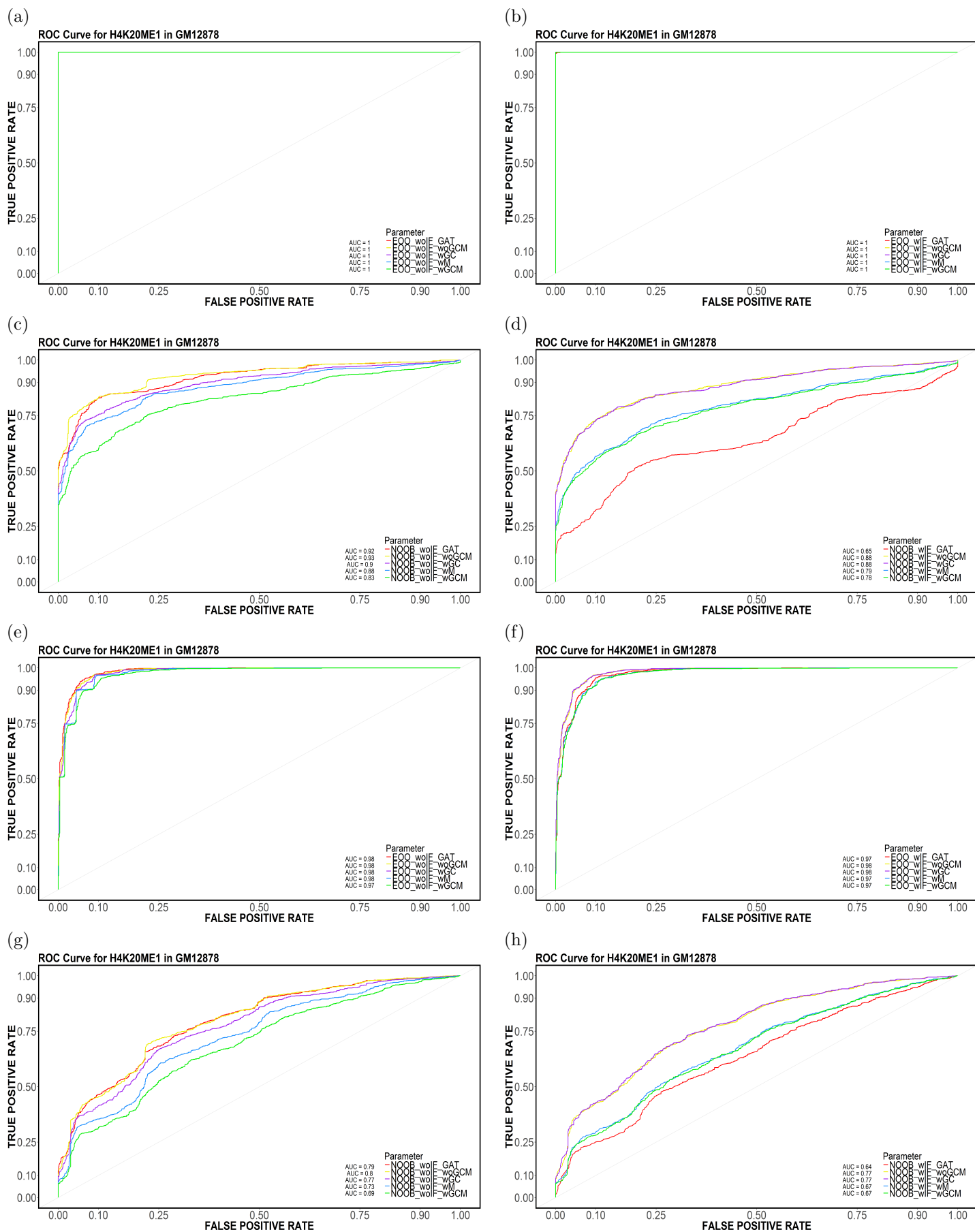


Figure 3: Element-based ROC curves for H4K20ME1 in GM12878 under (a,b) (E00, CompletelyDiscard, Top5) (c,d) (NOOB, CompletelyDiscard, Top5) (e,f) (E00, TakeTheLongest, Top20) (g,h) (NOOB, TakeTheLongest, Top20) settings.

4 H4K20ME1 in K562, ROC Curve Figures

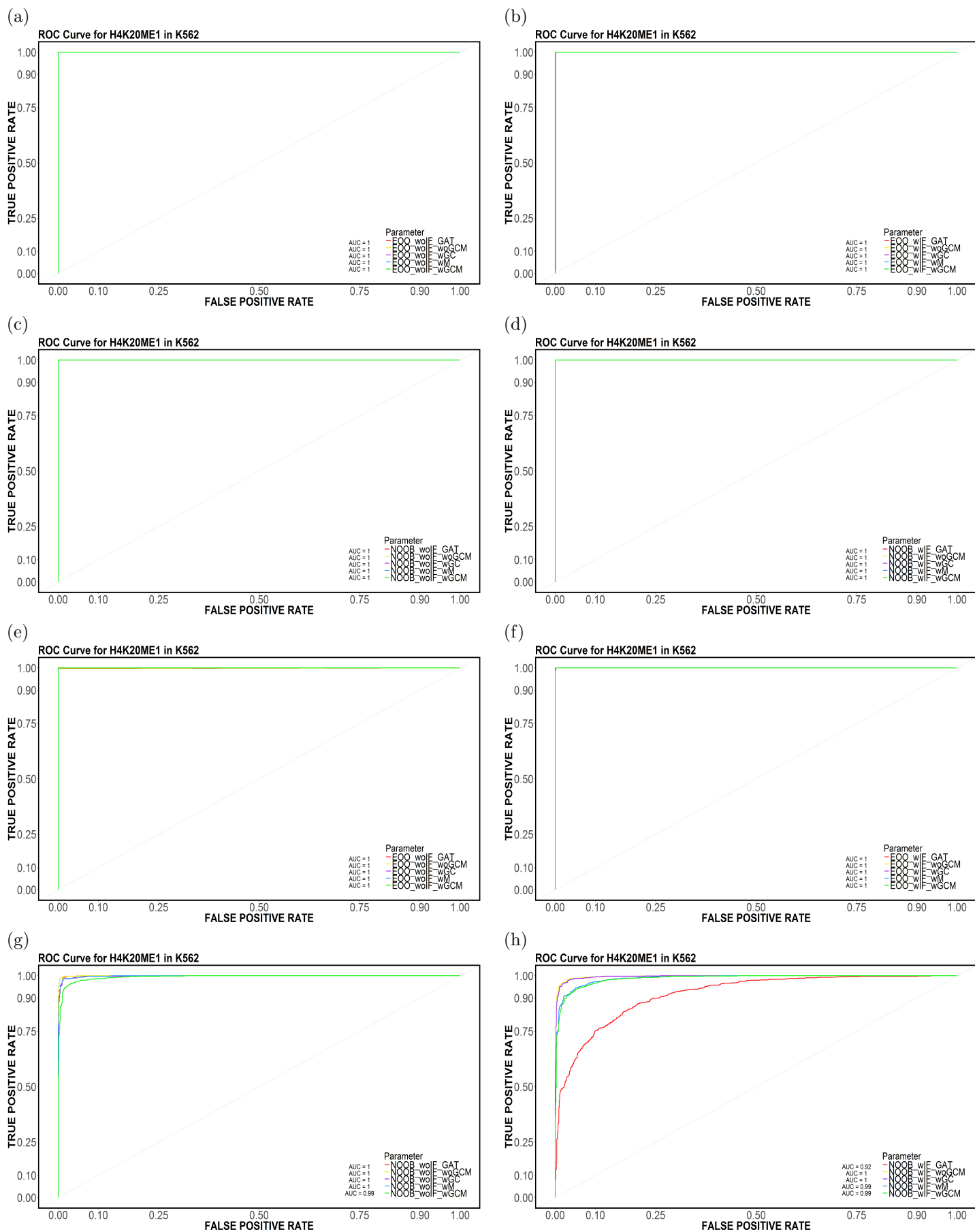


Figure 4: Element-based ROC curves for H4K20ME1 in K562 under (a,b) (E00, CompletelyDiscard, Top5) (c,d) (NOOB, CompletelyDiscard, Top5) (e,f) (E00, TakeTheLongest, Top20) (g,h) (NOOB, TakeTheLongest, Top20) settings.

5 H3K4ME1 in GM12878, ROC Curve Figures

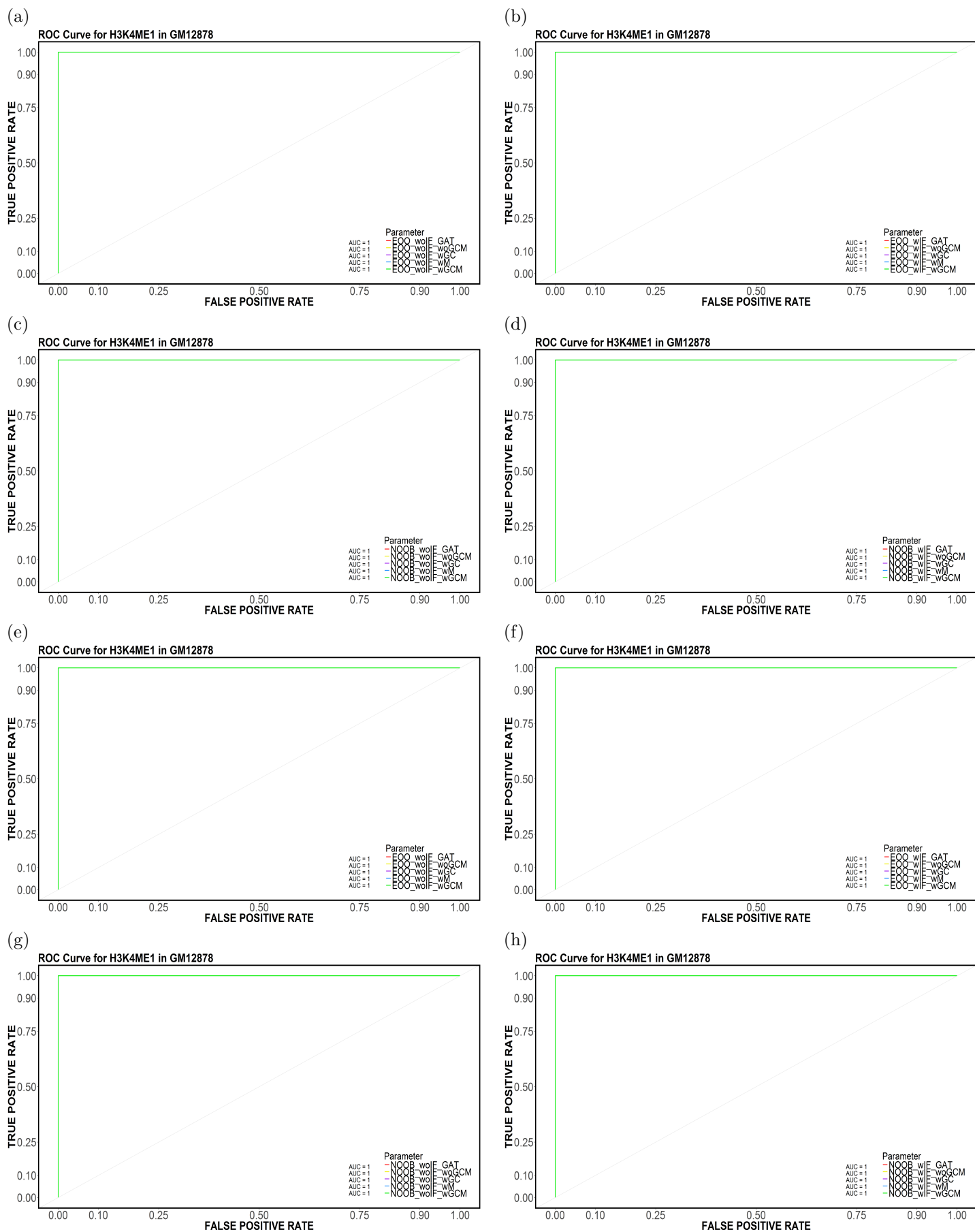


Figure 5: Element-based ROC curves for H3K4ME1 in GM12878 under (a,b) (E00, CompletelyDiscard, Top5) (c,d) (NOOB, CompletelyDiscard, Top5) (e,f) (E00, TakeTheLongest, Top20) (g,h) (NOOB, TakeTheLongest, Top20) settings.

6 H3K4ME1 in K562, ROC Curve Figures

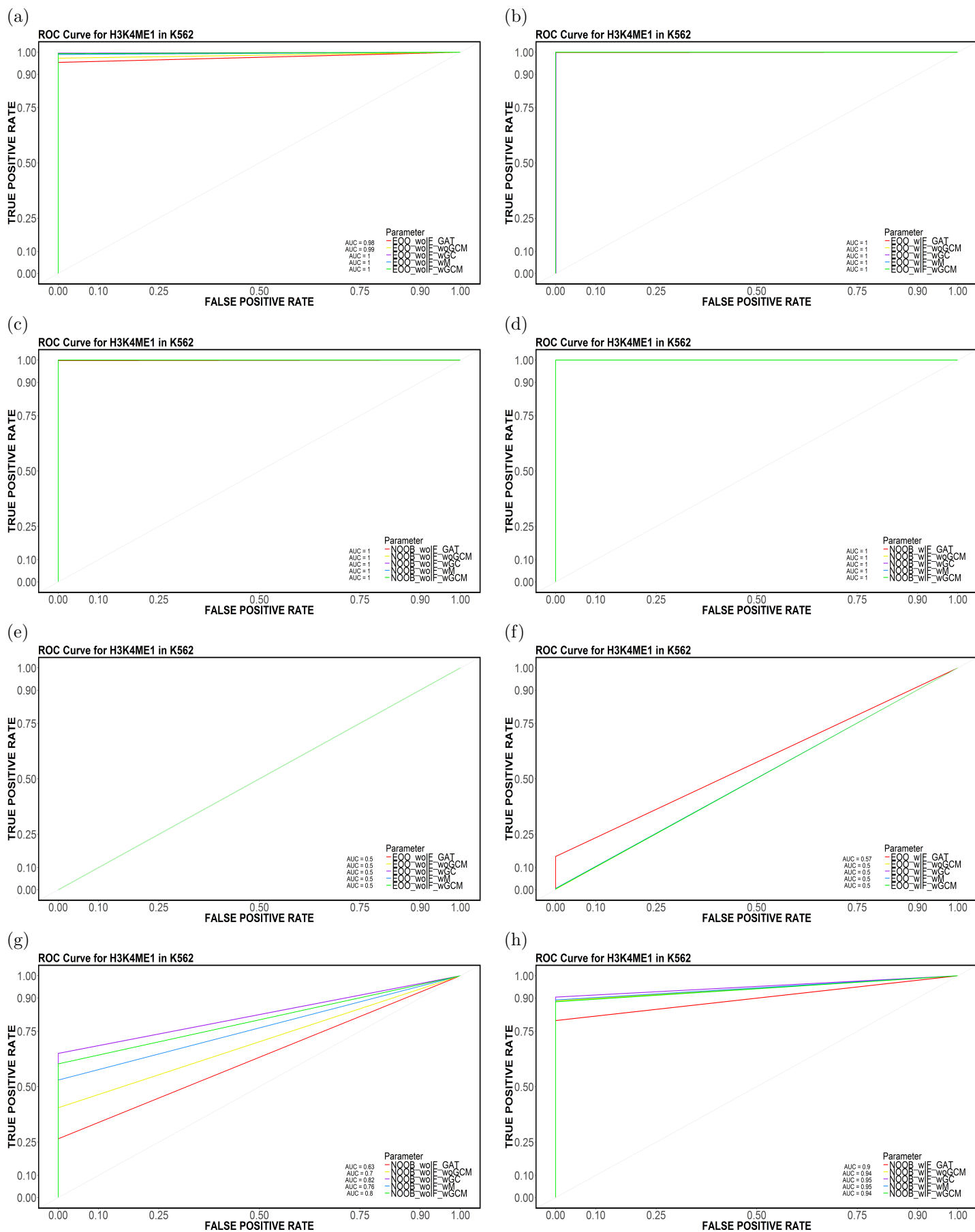


Figure 6: Element-based ROC curves for H3K4ME1 in K562 under (a,b) (E00,CompletelyDiscard,Top5) (c,d) (NOOB,CompletelyDiscard,Top5) (e,f) (E00,TakeTheLongest,Top20) (g,h) (NOOB,TakeTheLongest,Top20) settings.

7 H3K36ME3 in GM12878, ROC Curve Figures

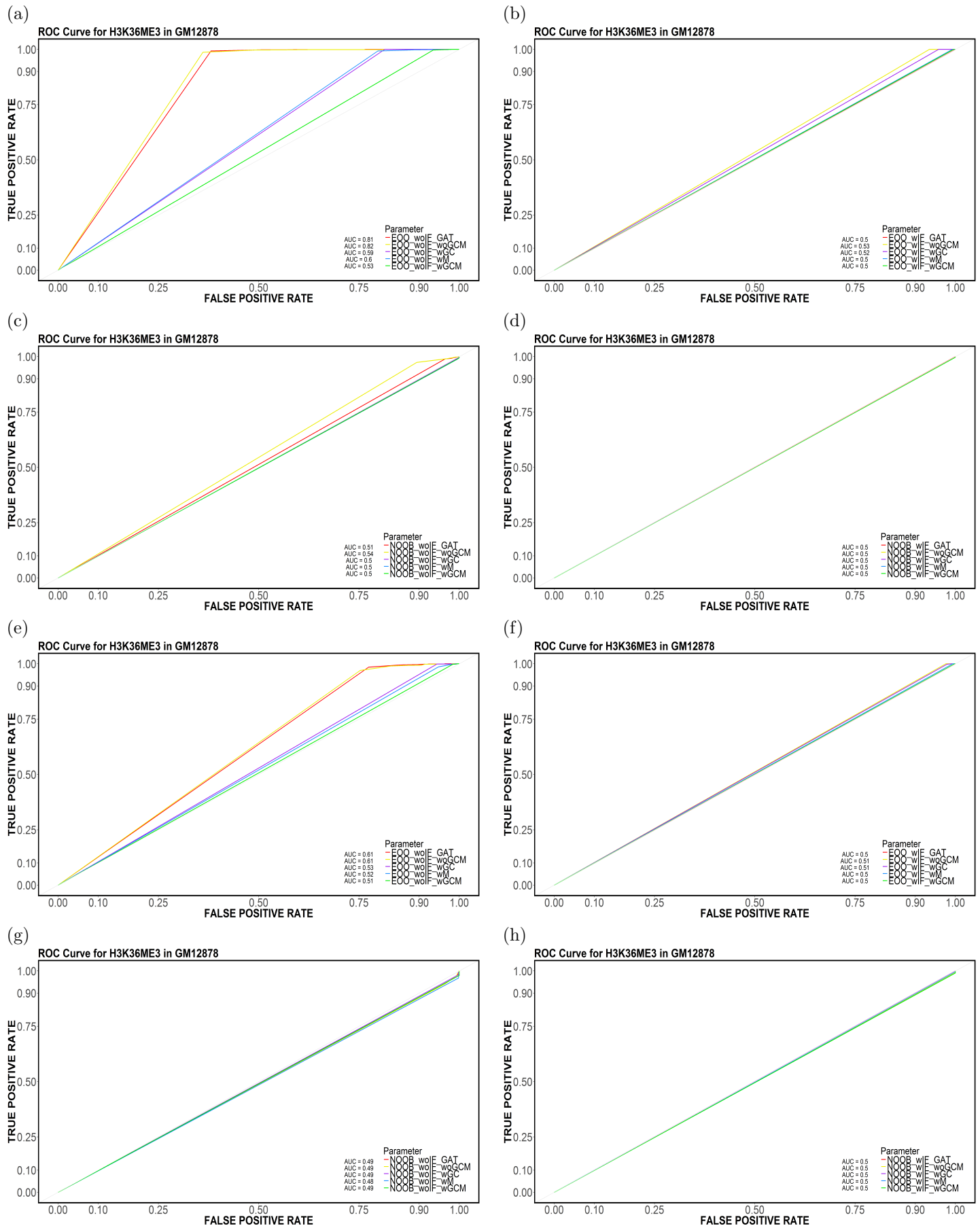


Figure 7: Element-based ROC curves for H3K36ME3 in GM12878 under (a,b) (E00, CompletelyDiscard, Top5) (c,d) (NOOB, CompletelyDiscard, Top5) (e,f) (E00, TakeTheLongest, Top20) (g,h) (NOOB, TakeTheLongest, Top20) settings.

8 H3K36ME3 in K562, ROC Curve Figures

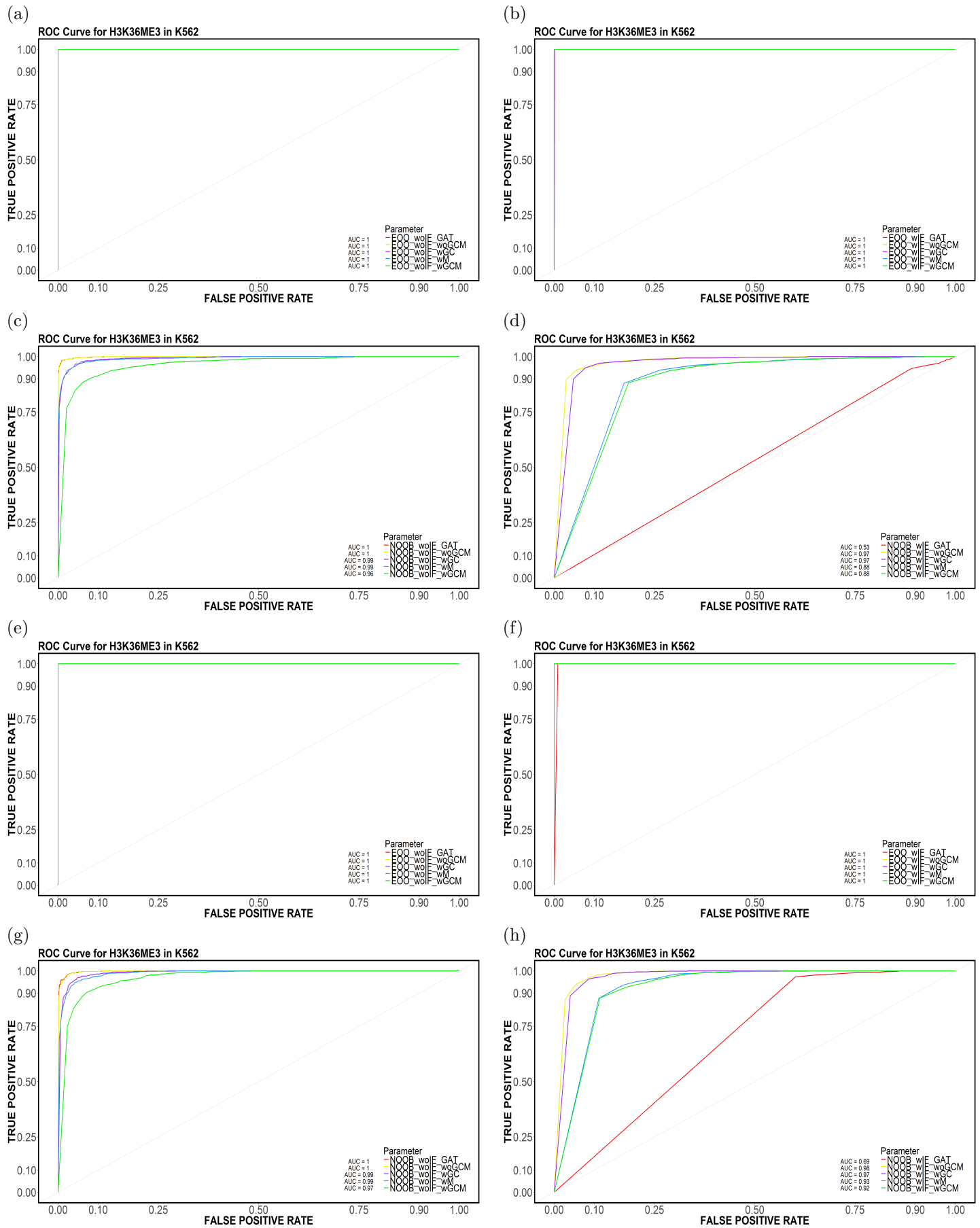


Figure 8: Element-based ROC curves for H3K36ME3 in K562 under (a,b) (E00, CompletelyDiscard, Top5) (c,d) (NOOB, CompletelyDiscard, Top5) (e,f) (E00, TakeTheLongest, Top20) (g,h) (NOOB, TakeTheLongest, Top20) settings.

9 H2AZ in GM12878, ROC Curve Figures

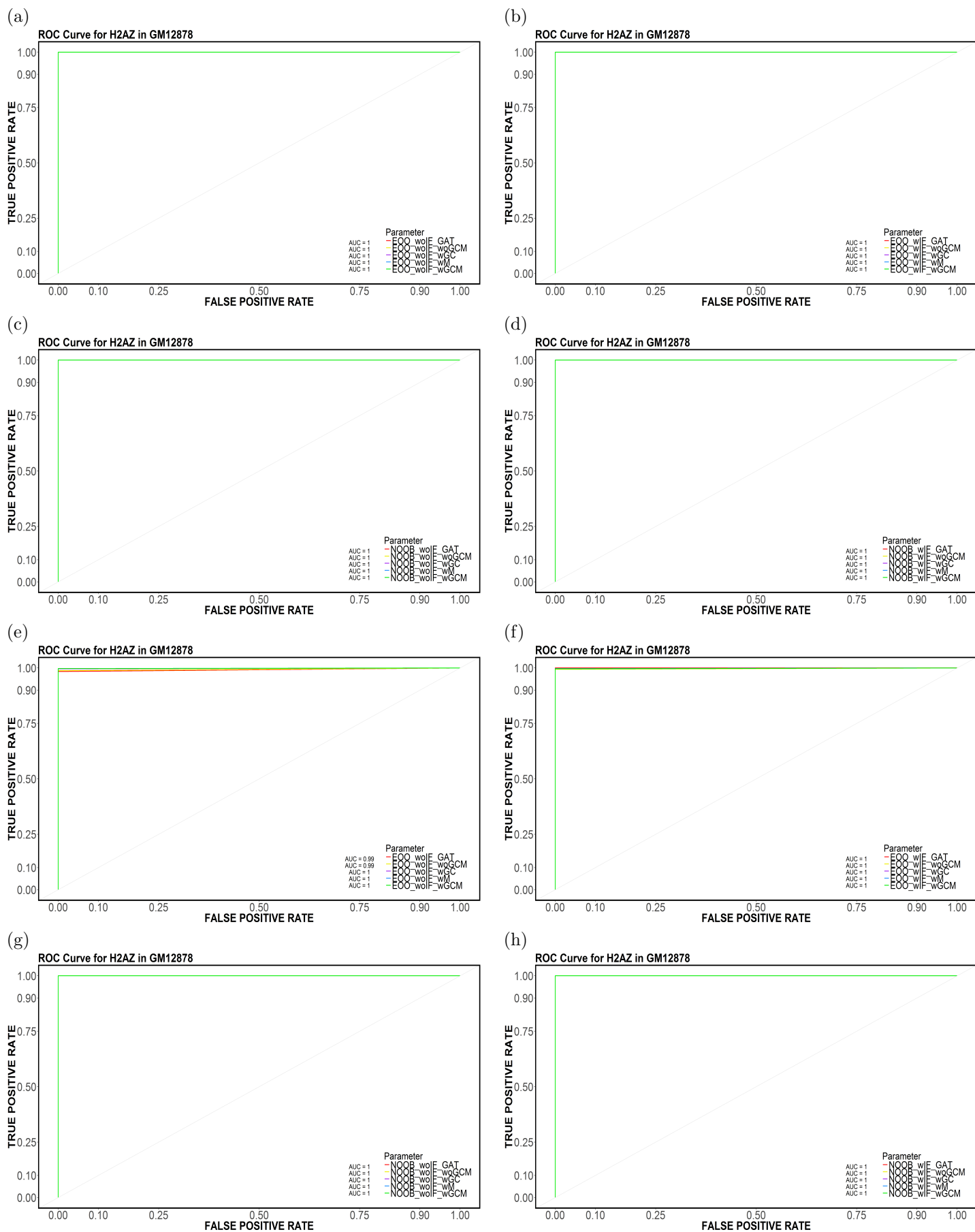


Figure 9: Element-based ROC curves for H2AZ in GM12878 under (a,b) (E00,CompletelyDiscard,Top5) (c,d) (NOOB,CompletelyDiscard,Top5) (e,f) (E00,TakeTheLongest,Top20) (g,h) (NOOB,TakeTheLongest,Top20) settings.

10 H2AZ in K562, ROC Curve Figures

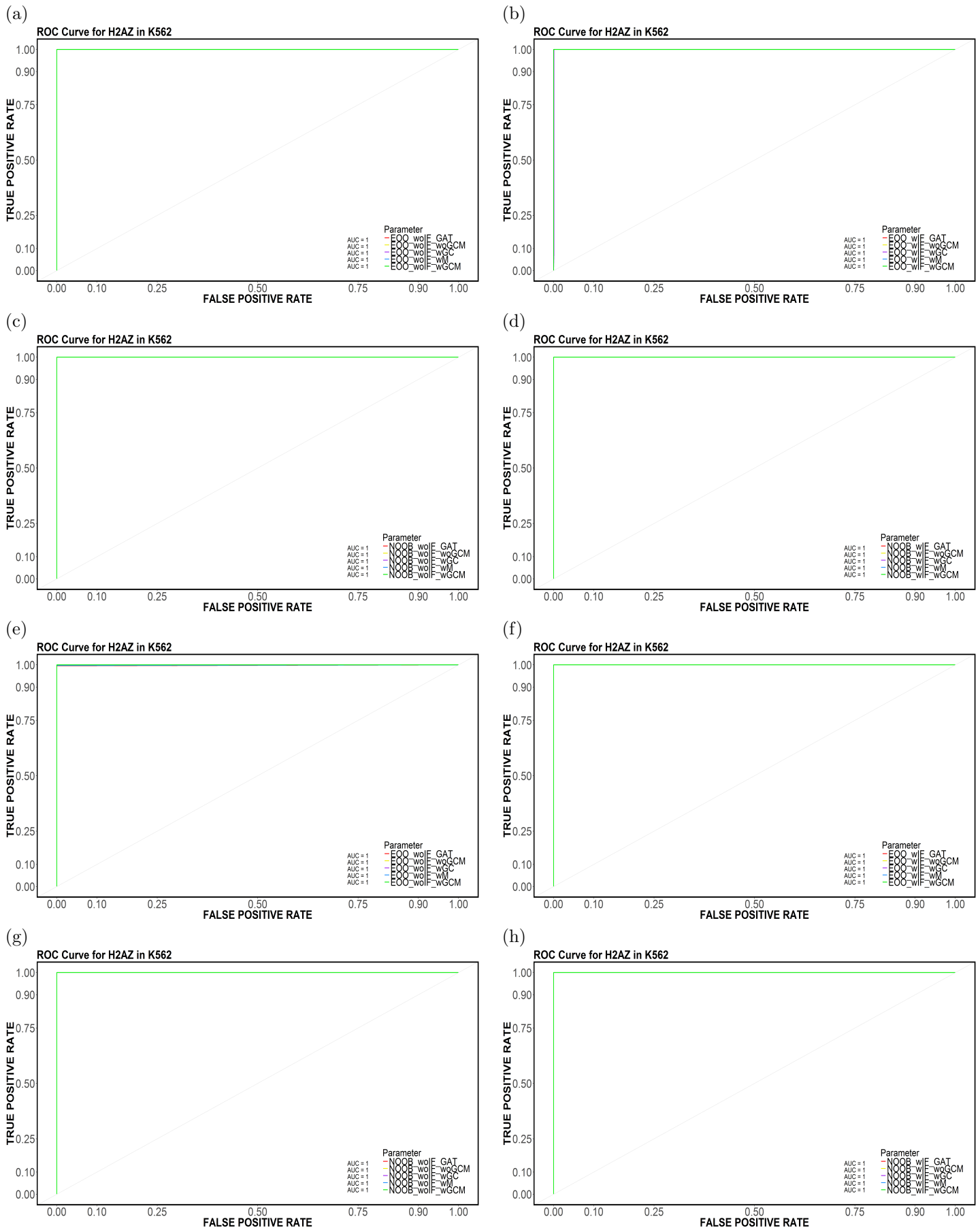


Figure 10: Element-based ROC curves for H2AZ in K562 under (a,b) (E00,CompletelyDiscard,Top5) (c,d) (NOOB,CompletelyDiscard,Top5) (e,f) (E00,TakeTheLongest,Top20) (g,h) (NOOB,TakeTheLongest,Top20) settings.

11 H3K27AC in GM12878, ROC Curve Figures

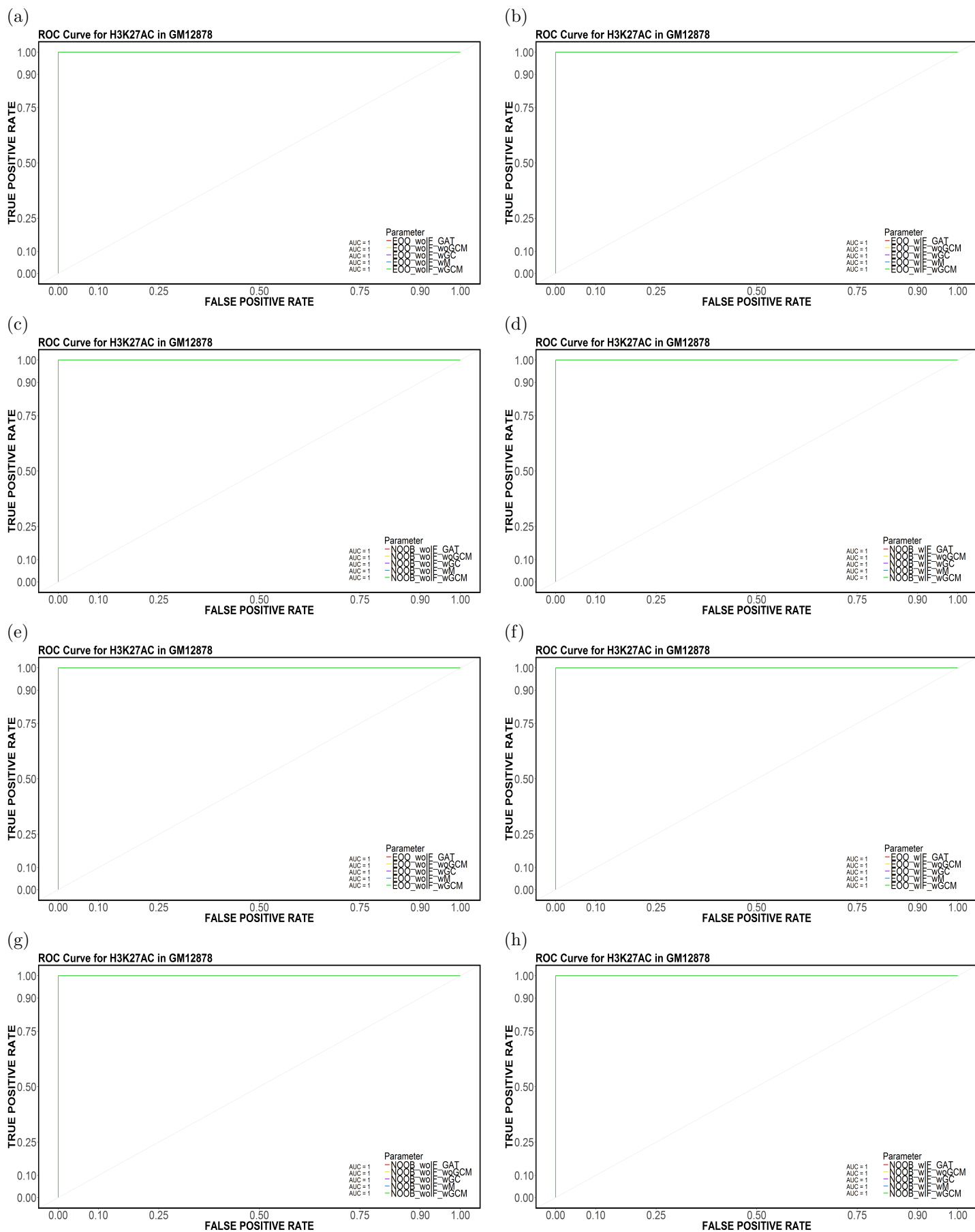


Figure 11: Element-based ROC curves for H3K27AC in GM12878 under (a,b) (E00,CompletelyDiscard,Top5) (c,d) (NOOB,CompletelyDiscard,Top5) (e,f) (E00,TakeTheLongest,Top20) (g,h) (NOOB,TakeTheLongest,Top20) settings.

12 H3K27AC in K562, ROC Curve Figures

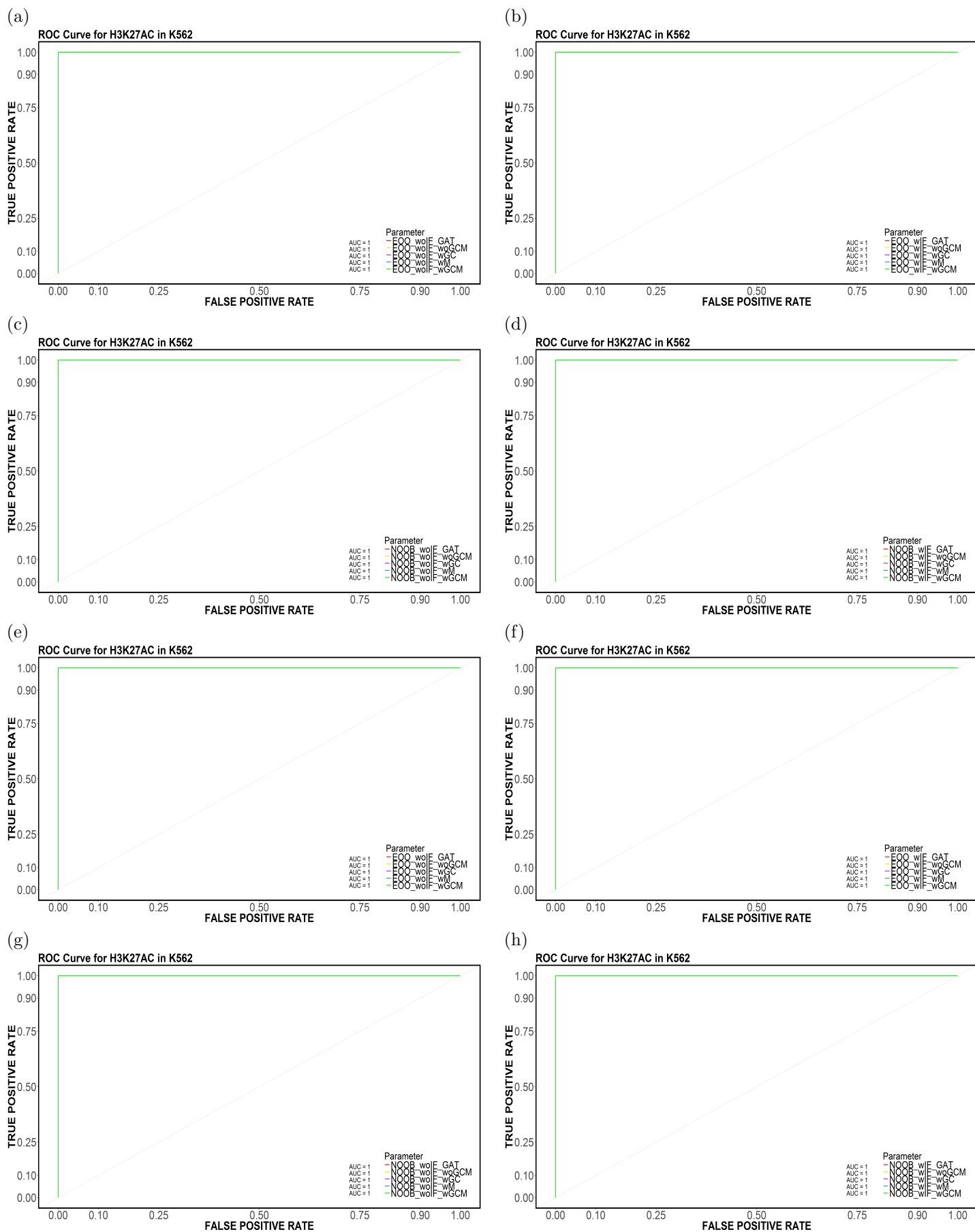


Figure 12: Element-based ROC curves for H3K27AC in K562 under (a,b) (E00,CompletelyDiscard,Top5) (c,d) (NOOB,CompletelyDiscard,Top5) (e,f) (E00,TakeTheLongest,Top20) (g,h) (NOOB,TakeTheLongest,Top20) settings.

13 H3K4ME2 in GM12878, ROC Curve Figures

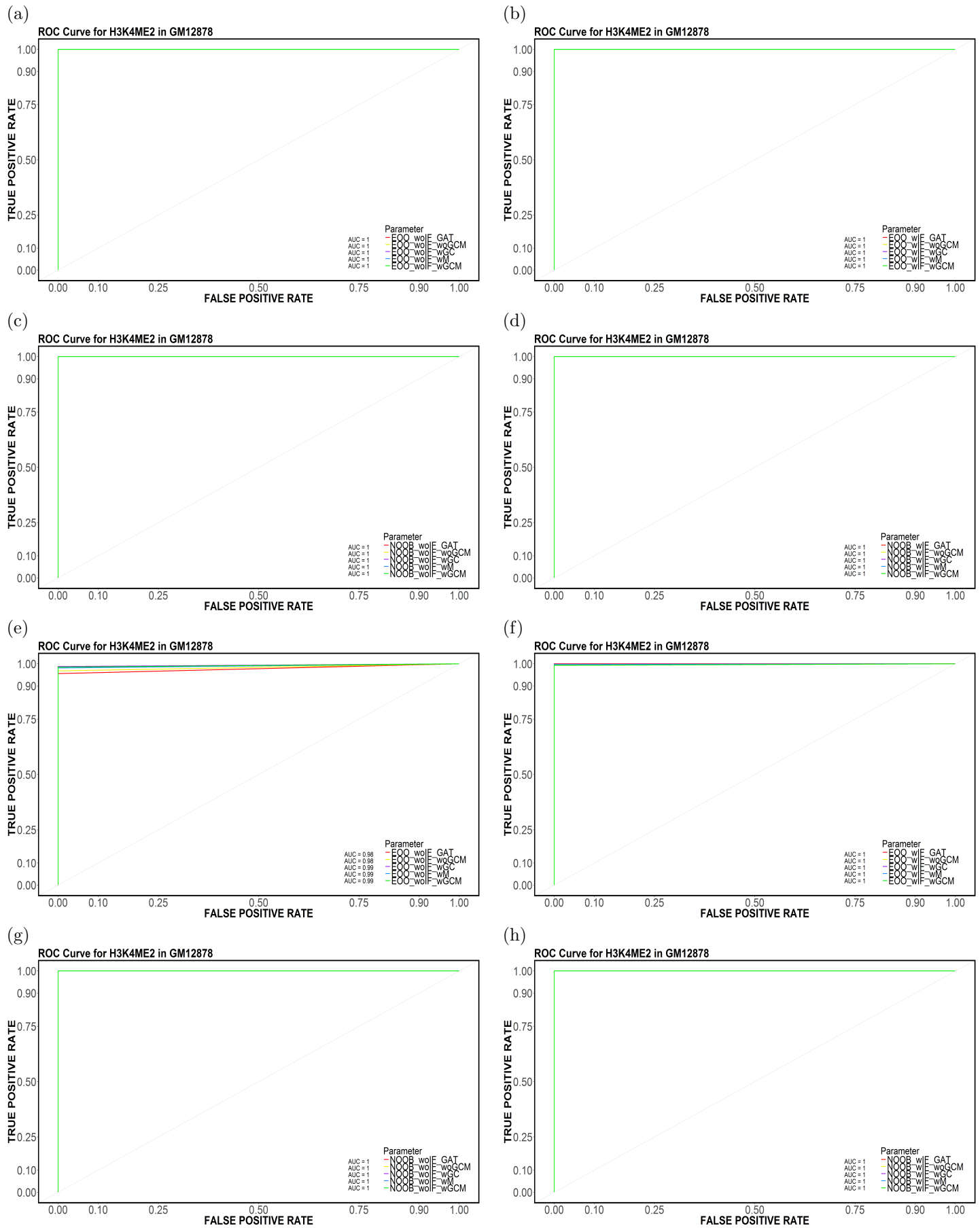


Figure 13: Element-based ROC curves for H3K4ME2 in GM12878 under (a,b) (E00,CompletelyDiscard,Top5) (c,d) (NOOB,CompletelyDiscard,Top5) (e,f) (E00,TakeTheLongest,Top20) (g,h) (NOOB,TakeTheLongest,Top20) settings.

14 H3K4ME2 in K562, ROC Curve Figures

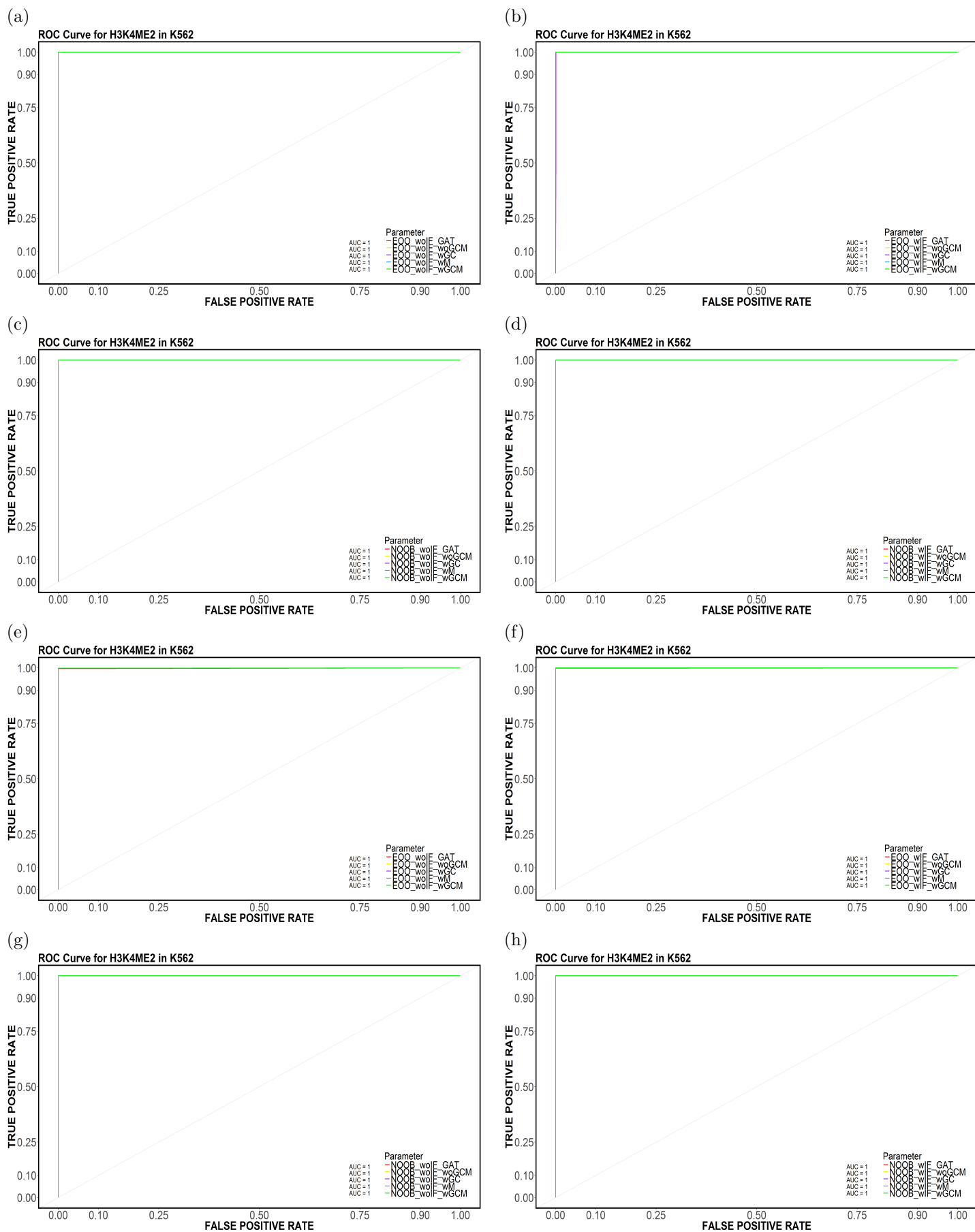


Figure 14: Element-based ROC curves for H3K4ME2 in K562 under (a,b) (E00,CompletelyDiscard,Top5) (c,d) (NOOB,CompletelyDiscard,Top5) (e,f) (E00,TakeTheLongest,Top20) (g,h) (NOOB,TakeTheLongest,Top20) settings.

15 H3K4ME3 in GM12878, ROC Curve Figures

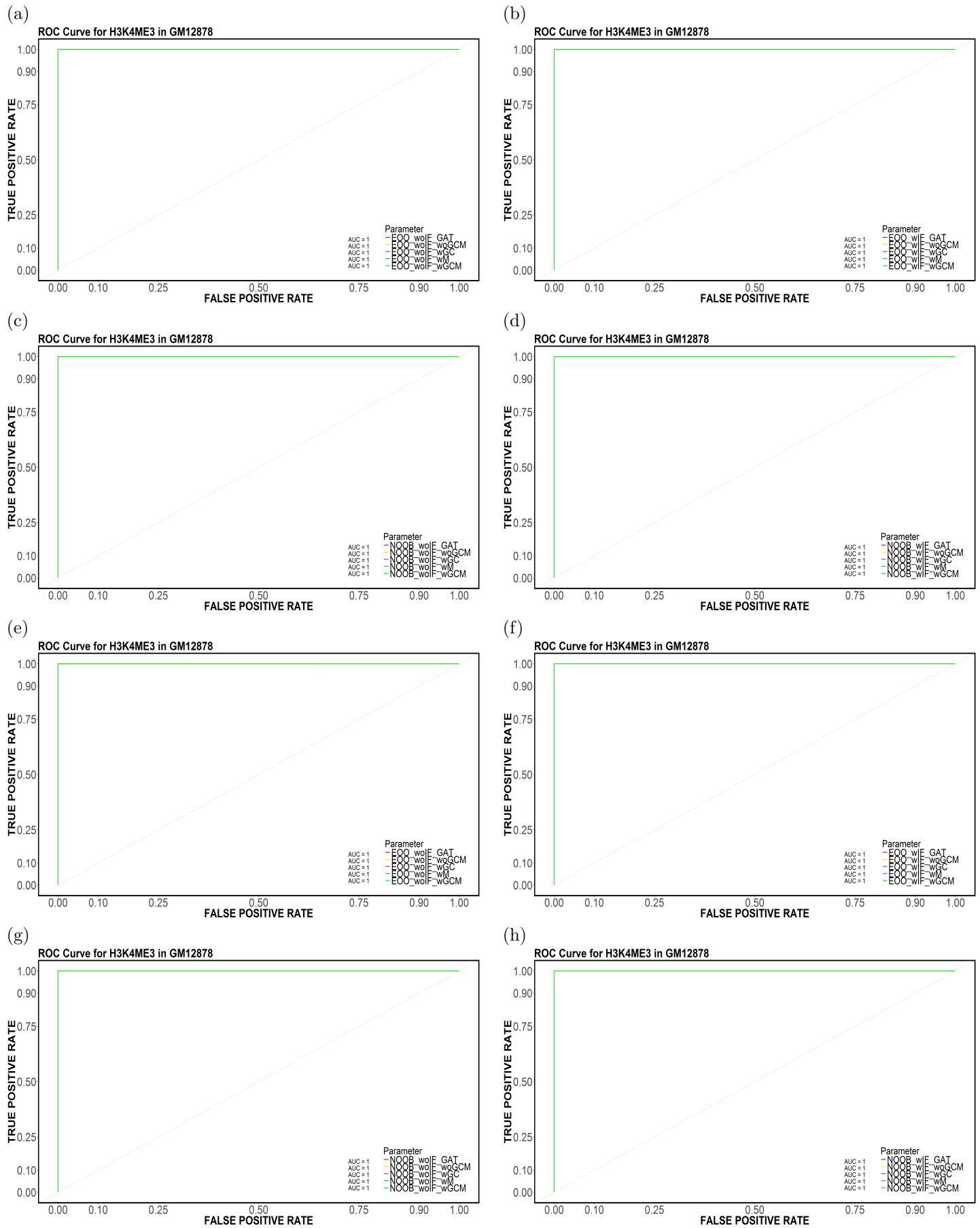


Figure 15: Element-based ROC curves for H3K4ME3 in GM12878 under (a,b) (E00, CompletelyDiscard, Top5) (c,d) (NOOB, CompletelyDiscard, Top5) (e,f) (E00, TakeTheLongest, Top20) (g,h) (NOOB, TakeTheLongest, Top20) settings.

16 H3K4ME3 in K562, ROC Curve Figures

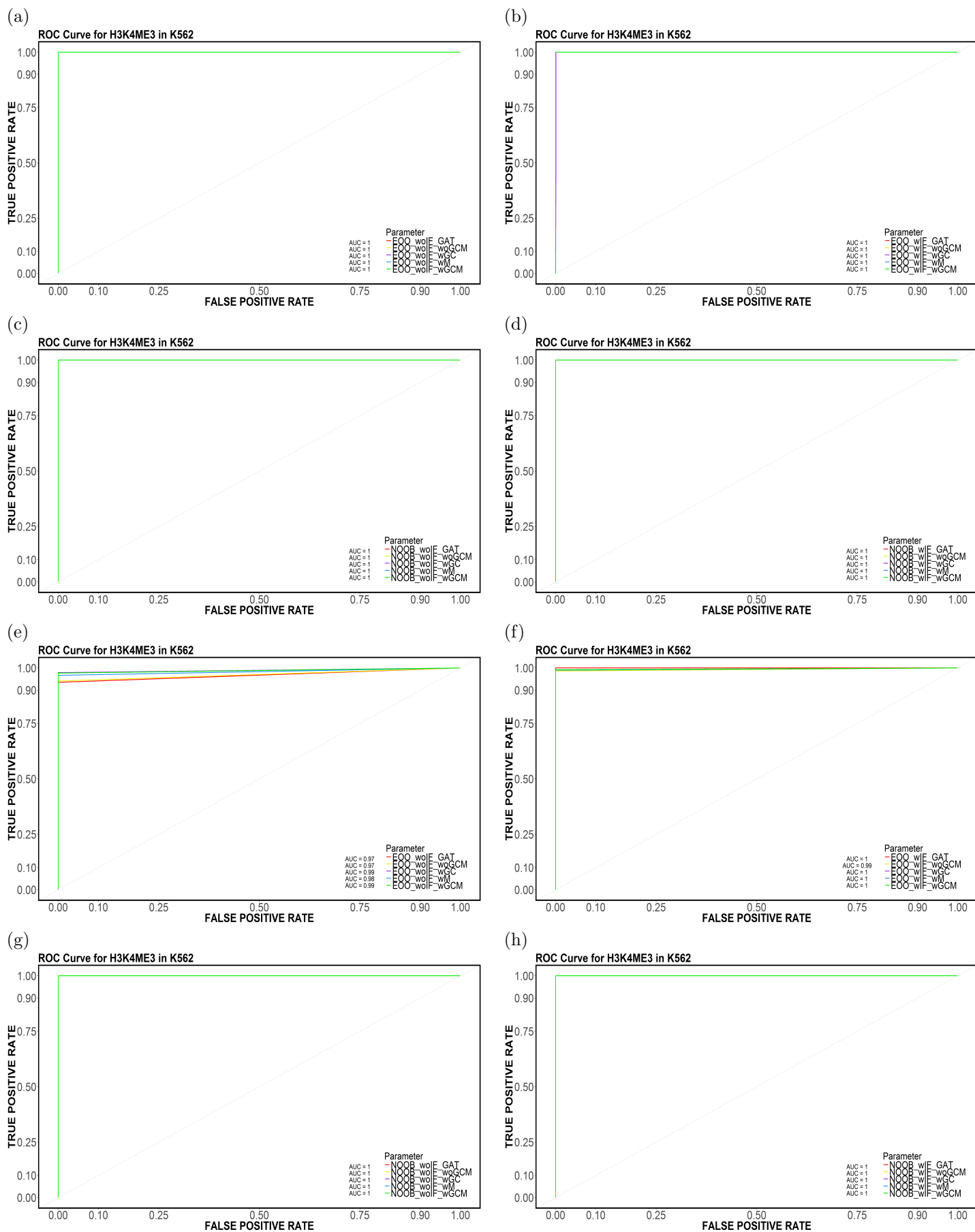


Figure 16: Element-based ROC curves for H3K4ME3 in K562 under (a,b) (E00,CompletelyDiscard,Top5) (c,d) (NOOB,CompletelyDiscard,Top5) (e,f) (E00,TakeTheLongest,Top20) (g,h) (NOOB,TakeTheLongest,Top20) settings.

17 H3K79ME2 in GM12878, ROC Curve Figures

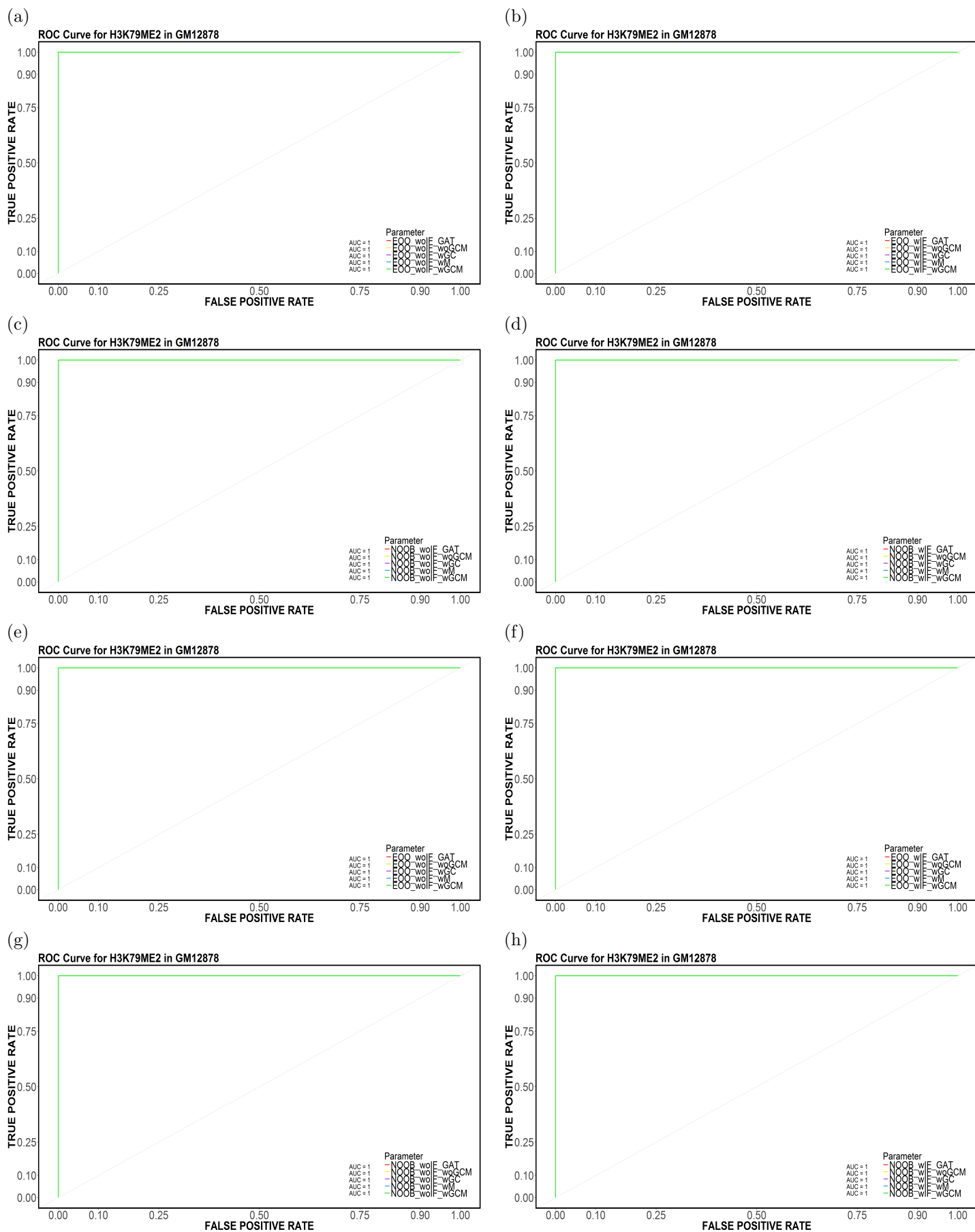


Figure 17: Element-based ROC curves for H3K79ME2 in GM12878 under (a,b) (E00, CompletelyDiscard, Top5) (c,d) (NOOB, CompletelyDiscard, Top5) (e,f) (E00, TakeTheLongest, Top20) (g,h) (NOOB, TakeTheLongest, Top20) settings.

18 H3K79ME2 in K562, ROC Curve Figures

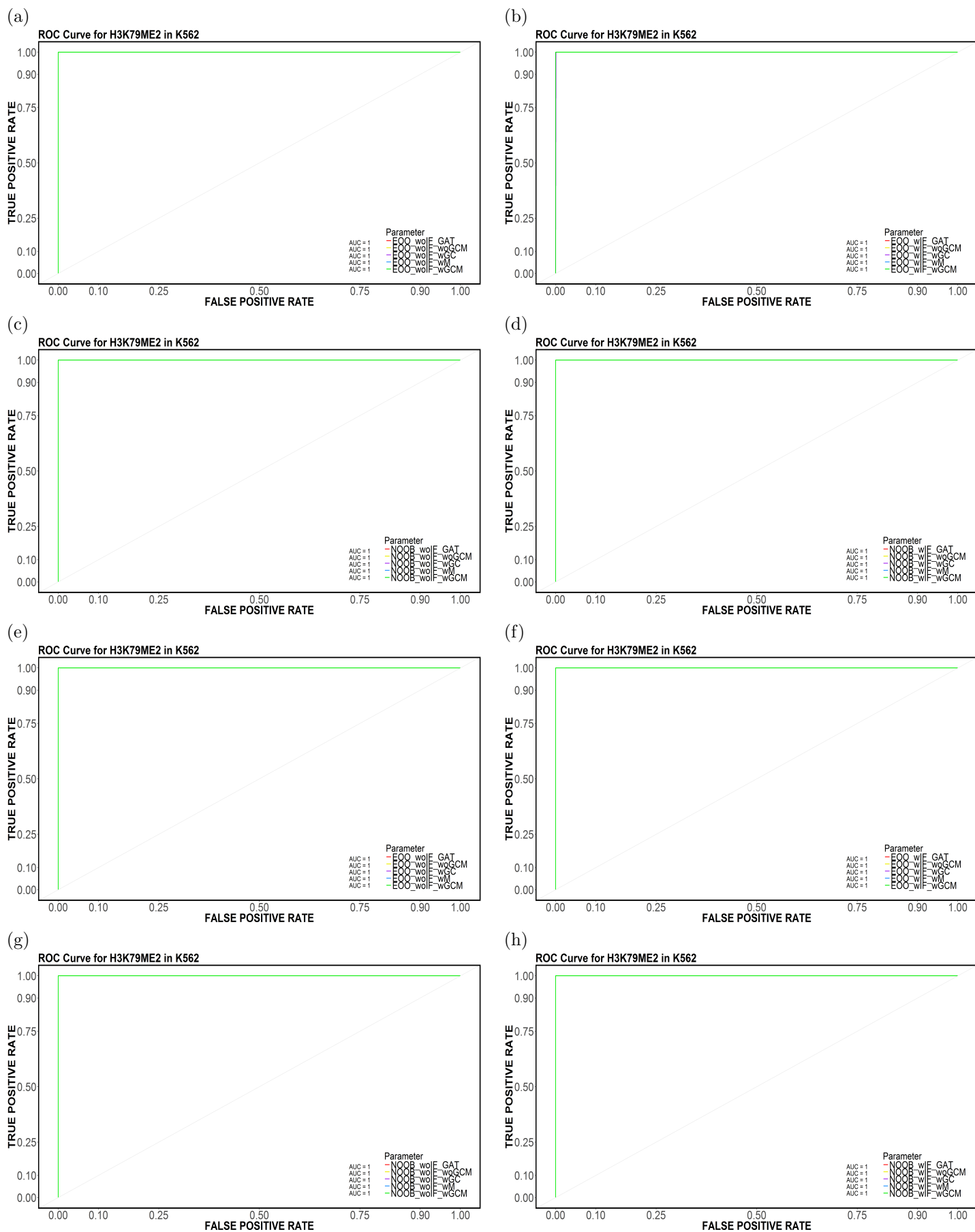


Figure 18: Element-based ROC curves for H3K79ME2 in K562 under (a,b) (E00, CompletelyDiscard, Top5) (c,d) (NOOB, CompletelyDiscard, Top5) (e,f) (E00, TakeTheLongest, Top20) (g,h) (NOOB, TakeTheLongest, Top20) settings.

19 H3K9AC in GM12878, ROC Curve Figures

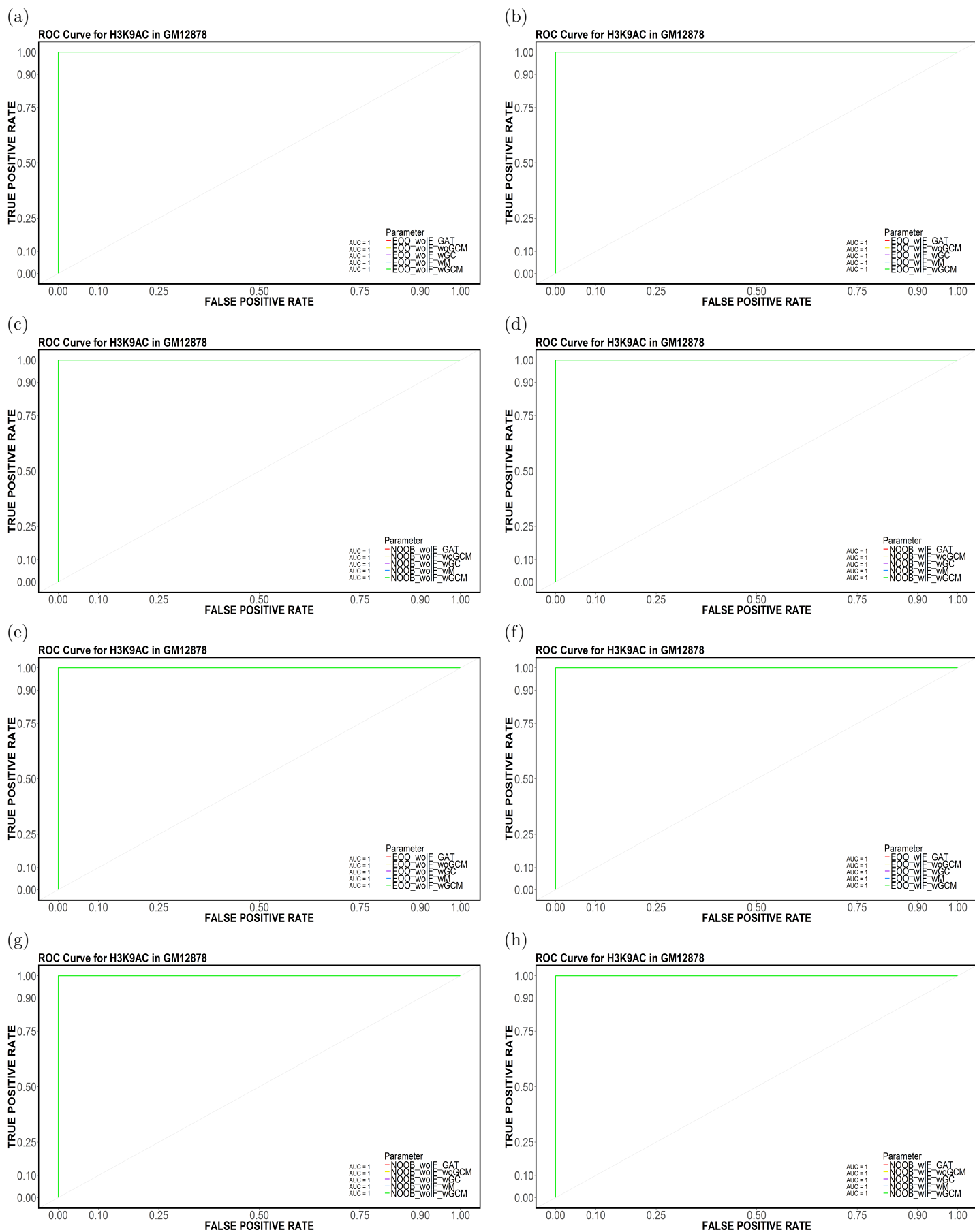


Figure 19: Element-based ROC curves for H3K9AC in GM12878 under (a,b) (E00,CompletelyDiscard,Top5) (c,d) (NOOB,CompletelyDiscard,Top5) (e,f) (E00,TakeTheLongest,Top20) (g,h) (NOOB,TakeTheLongest,Top20) settings.

20 H3K9AC in K562, ROC Curve Figures

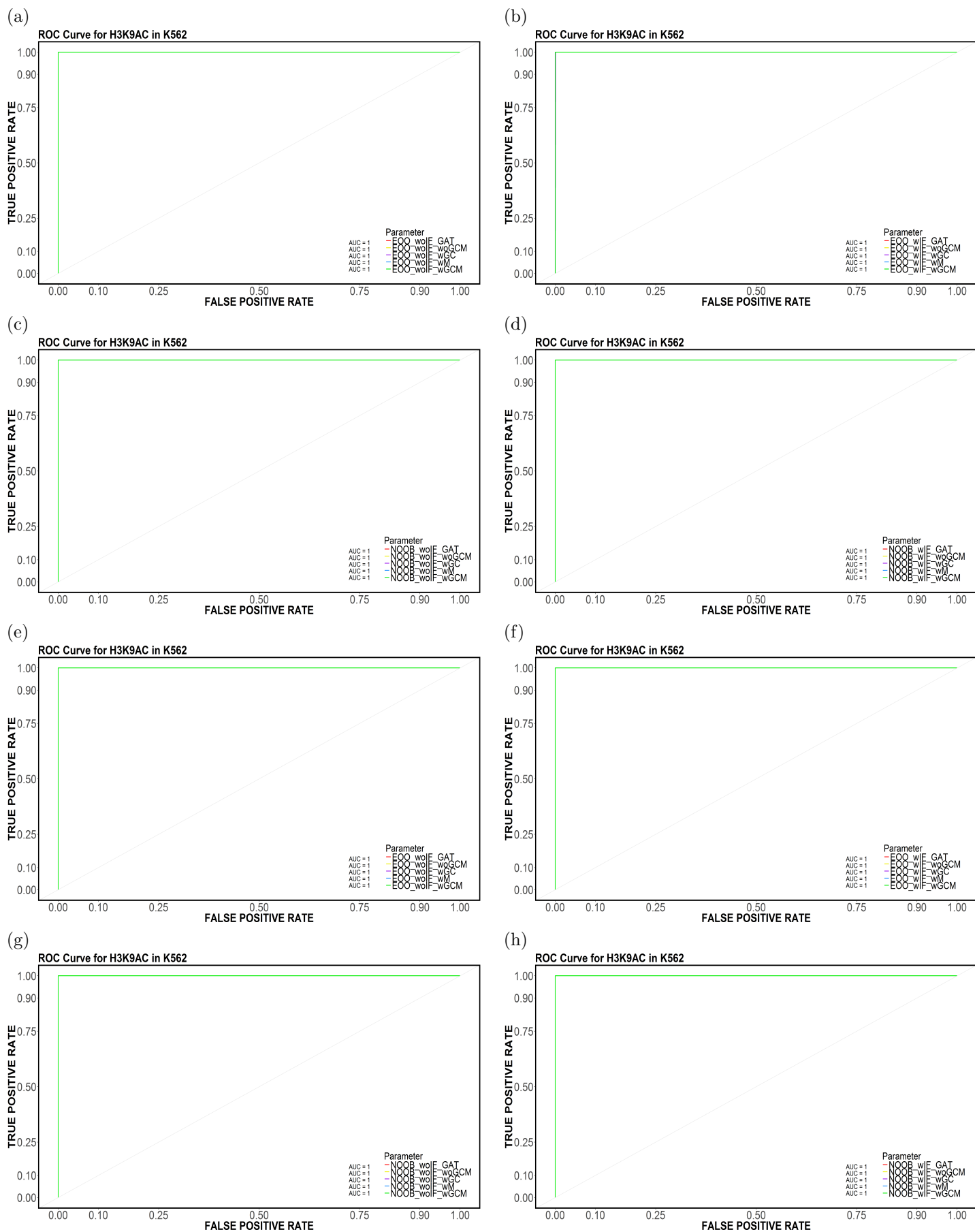


Figure 20: Element-based ROC curves for H3K9AC in K562 under (a,b) (E00,CompletelyDiscard,Top5) (c,d) (NOOB,CompletelyDiscard,Top5) (e,f) (E00,TakeTheLongest,Top20) (g,h) (NOOB,TakeTheLongest,Top20) settings.

21 H3K9ACB in K562, ROC Curve Figures

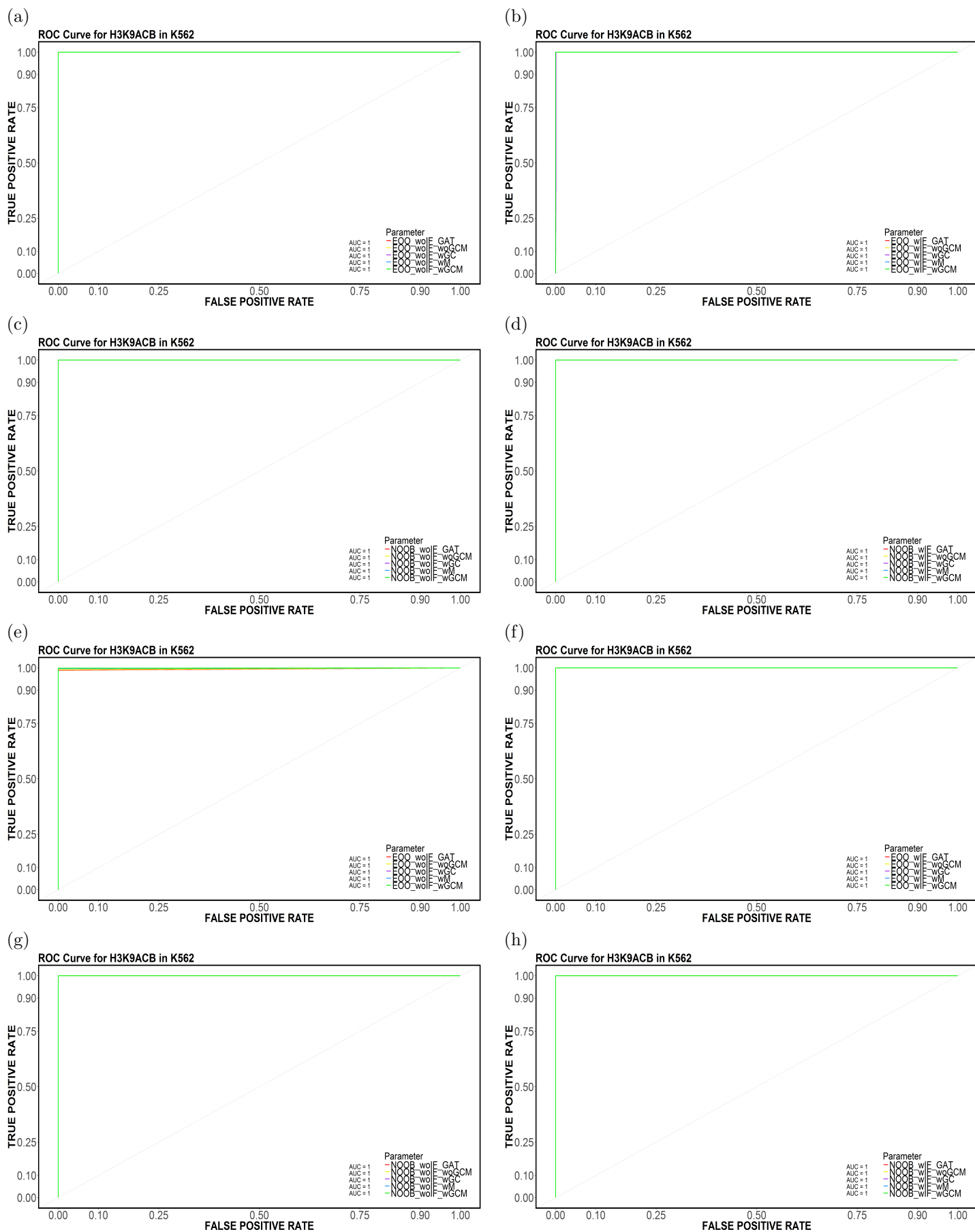


Figure 21: Element-based ROC curves for H3K9ACB in K562 under (a,b) (E00,CompletelyDiscard,Top5) (c,d) (NOOB,CompletelyDiscard,Top5) (e,f) (E00,TakeTheLongest,Top20) (g,h) (NOOB,TakeTheLongest,Top20) settings.

22 POL2 in GM12878, ROC Curve Figures

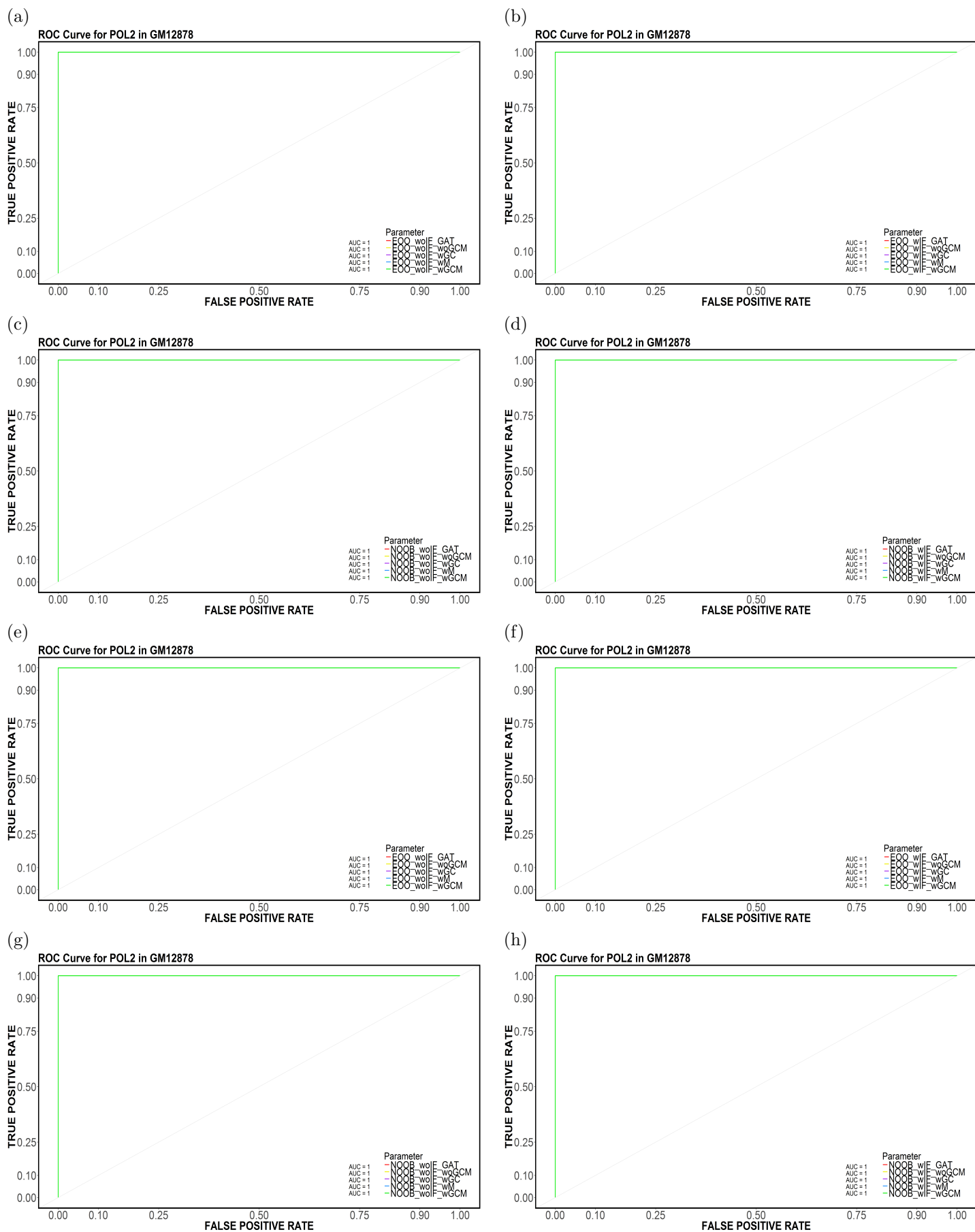


Figure 22: Element-based ROC curves for POL2 in GM12878 under (a,b) (E00, CompletelyDiscard, Top5) (c,d) (NOOB, CompletelyDiscard, Top5) (e,f) (E00, TakeTheLongest, Top20) (g,h) (NOOB, TakeTheLongest, Top20) settings.

23 POL2 in K562, ROC Curve Figures

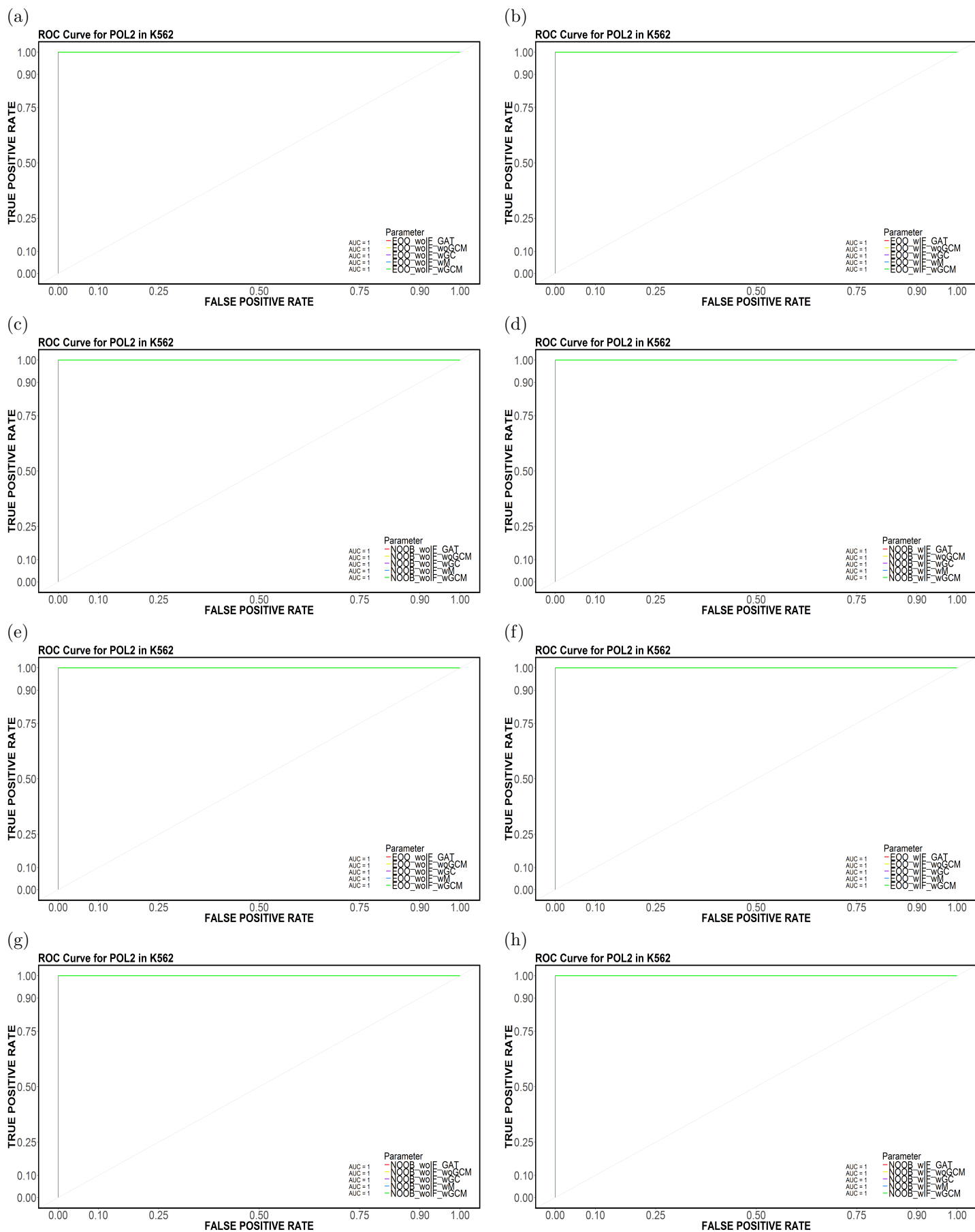


Figure 23: Element-based ROC curves for POL2 in K562 under (a,b) (E00,CompletelyDiscard,Top5) (c,d) (NOOB,CompletelyDiscard,Top5) (e,f) (E00,TakeTheLongest,Top20) (g,h) (NOOB,TakeTheLongest,Top20) settings.

24 H3K27ME3 in GM12878, ROC Curve Figures

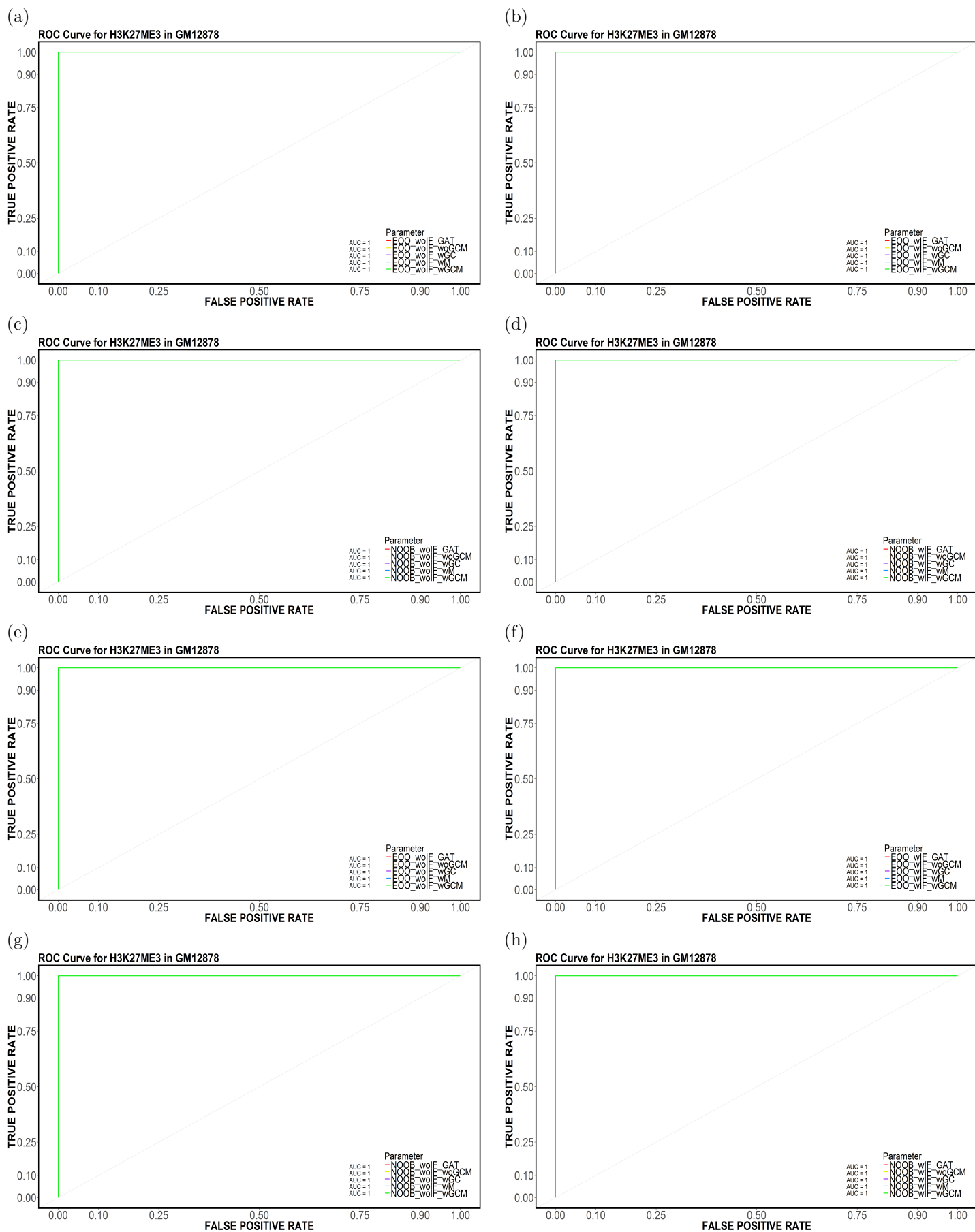


Figure 24: Element-based ROC curves for H3K27ME3 in GM12878 under (a,b) (E00, CompletelyDiscard, Top5) (c,d) (NOOB, CompletelyDiscard, Top5) (e,f) (E00, TakeTheLongest, Top20) (g,h) (NOOB, TakeTheLongest, Top20) settings.

25 H3K27ME3 in K562, ROC Curve Figures

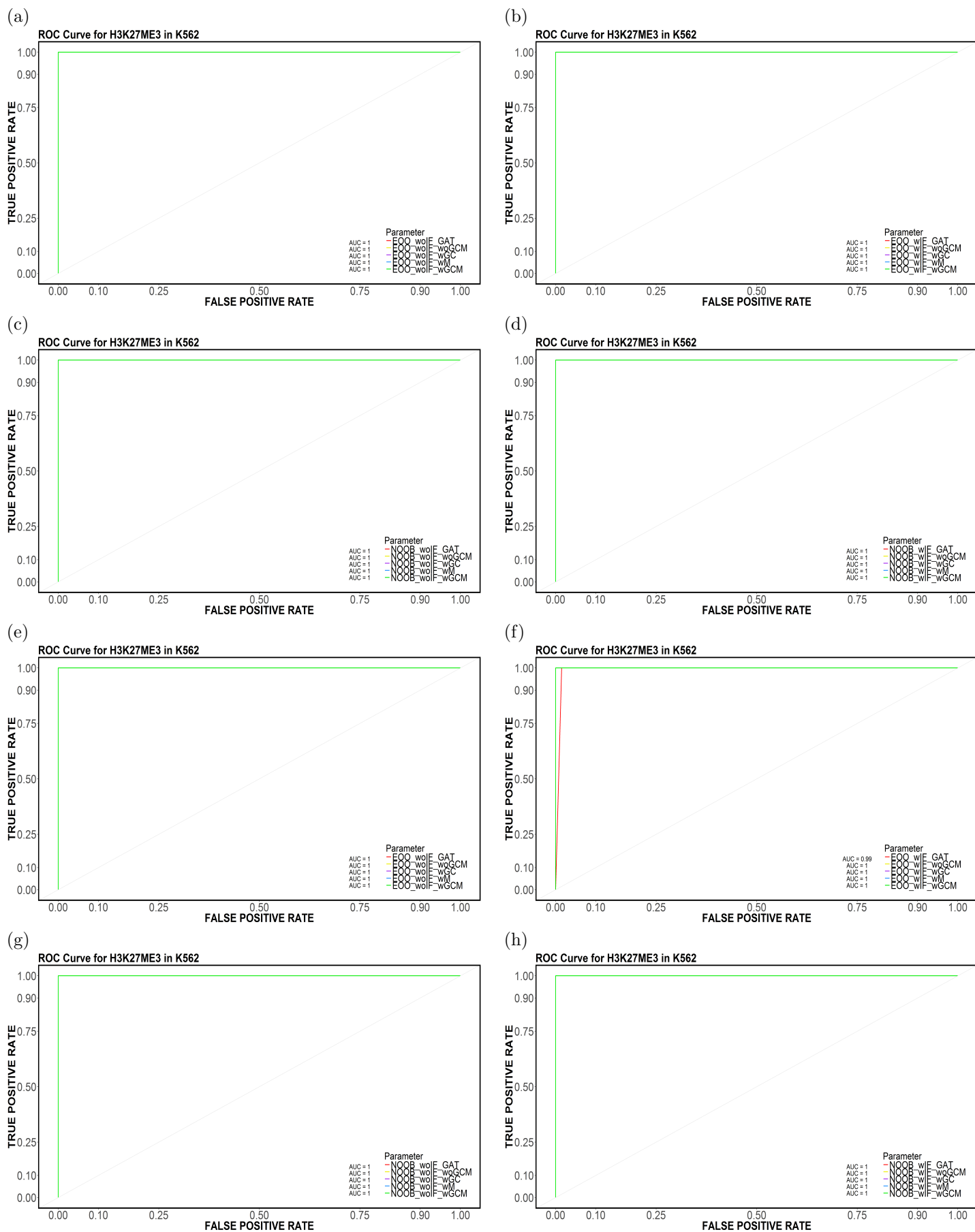


Figure 25: Element-based ROC curves for H3K27ME3 in K562 under (a,b) (E00,CompletelyDiscard,Top5) (c,d) (NOOB,CompletelyDiscard,Top5) (e,f) (E00,TakeTheLongest,Top20) (g,h) (NOOB,TakeTheLongest,Top20) settings.